

**ENVIRONMENTAL PROTECTION COMMISSION[567]**

**Adopted and Filed**

Pursuant to the authority of Iowa Code section 455B.133, the Environmental Protection Commission (Commission) hereby amends Chapter 22, “Controlling Pollution,” and Chapter 23, “Emission Standards for Contaminants,” Iowa Administrative Code.

First, the Commission in this rule making establishes in Chapter 22 best management practices (BMPs) for grain vacuuming operations at small grain elevators. The BMPs include practical activities that owners and operators may use at grain elevators to minimize dust and possible air quality impacts resulting from vacuuming grain out of storage structures. The BMPs were developed through a stakeholder workgroup that was jointly organized by the Department of Natural Resources (Department) and Agribusiness Association of Iowa (AAI) and that included grain elevator operators and grain vacuum (grain vac) vendors.

Second, the Commission adopts changes to Chapter 23 to adopt by reference federal air toxics standards for chemical manufacturing plants and for prepared feeds manufacturing (also known as National Emission Standards for Hazardous Air Pollutants, or NESHAP).

The Commission had originally adopted these standards by reference in 2010. However, Executive Order (EO) 72 rescinded the adoption of these standards concurrent with the rescission of the RICE NESHAP. EO 72 stated that the RICE NESHAP was too costly for small utilities that maintain and operate rarely used emergency engines and the RICE NESHAP requirements could increase electricity rates for consumers. In response to the concerns from Governor Branstad as expressed in EO 72 and concerns from other stakeholders, the U.S. Environmental Protection Agency (EPA) agreed to reconsider the RICE NESHAP. Consequently, EPA updated the RICE NESHAP to provide more circumstances for emergency engines and for engines that participate in electricity management programs to operate under nonemergency conditions. The Commission adopted the updated RICE NESHAP in a previous rule making (see **ARC 1014C**, IAB 9/16/13).

Subsequent to EO 72, EPA updated the NESHAPs adopted in this rule making. The revised NESHAPs generally provide regulatory relief and clarify the previous requirements. The Commission is now adopting these NESHAPs. Upon adoption of the NESHAPs, the Department rather than EPA will be the primary implementation authority for these regulations in Iowa, allowing the Department to provide compliance assistance and outreach to affected facilities as soon as possible.

Notice of Intended Action was published in the Iowa Administrative Bulletin on May 14, 2014, as **ARC 1458C**, and a public hearing was held on June 16, 2014. The Department received no comments at the public hearing. The Department received two written comments prior to the June 16, 2014, deadline for public comments. One written comment supported the amendments. The other comment, from EPA Region 7, recommended providing clarification in the preamble to the adopted rules. The Commission provides clarification in the preamble, in response to EPA’s comments, as noted in the explanation for Item 3 and Item 4 below. The Commission did not make any changes to the adopted amendments from those published under Notice of Intended Action. The Department’s Public Participation Responsiveness Summary is available from the Department upon request.

**Item 1** amends subparagraph 22.10(3)“a”(2) to revise the BMPs for grain elevators currently adopted by reference. The BMPs for grain elevators are designed to reduce emissions of particulate matter that is less than 10 microns in diameter (PM<sub>10</sub>), especially dust that crosses the property line and that may adversely affect air quality at nearby businesses or residences. The BMP document includes both facilitywide and equipment-specific practices that apply to both new and existing equipment. The amendment adds to the current BMP document a list of management practices for grain vacuuming operations at grain storage bins. The management practices were developed and recommended by a stakeholder workgroup jointly coordinated by the Department and AAI. The changes to the BMP document are available from the Department, upon request, and at the Department’s Web site at

<http://www.iowadnr.gov/InsideDNR/RegulatoryAir/StakeholderInvolvement.aspx> (under the Public Input section).

### **Background**

In 2007, the Department worked with AAI and other stakeholders to develop flexible groupings for grain elevators. This collaboration resulted in rules that allowed over 800 owners and operators of small grain elevators (classified as “Group 1” elevators) to complete a one-page registration form rather than apply for an air construction permit. Additionally, the adopted rules (published in the 2/13/08 IAB as **ARC 6599B**) established the BMPs for small grain elevators.

Prior to 2008, most grain facilities used sweep augers to extract the remaining grain from the bottom of storage bins. Beginning in late 2009, the U.S. Occupational Safety and Health Administration (OSHA) sent letters to grain elevators stating that operators could not be inside a grain bin while an unguarded sweep auger operated inside the bin. As a result of the OSHA letters, more facilities use grain vacuuming to remove the remaining grain from storage bins.

With the wider use of grain vacuuming operations, the Department’s field offices started receiving dust complaints from residences and businesses located near grain elevators using grain vacs. The Department became concerned about PM<sub>10</sub> emissions and dust from increased use of grain vacuuming operations. The Department subsequently partnered with AAI to convene a stakeholder workgroup to develop solutions that address complaints and ensure compliance with air quality regulations. The amendment adopted in Item 1 is the result of this collaborative effort.

### **Stakeholder Involvement**

The Grain Vac Workgroup convened in August 2011. The workgroup consisted of ten participants in addition to representatives from AAI, the Department and the Iowa Department of Agriculture and Land Stewardship. The facility and business participants included representatives from grain elevators and grain vac vendors. The workgroup met two times between August 2011 and June 2012. In addition, the Department conducted three onsite visits to observe grain vac operations.

The adopted amendment revises the document, “Best Management Practices (BMP) for Grain Elevators (December 2007),” adopted by reference in subparagraph 22.10(3)“a”(2). The revisions incorporate management practices for grain vac operations. AAI provided written comments to the Notice of Intended Action in support of the BMPs. The BMPs for grain vac operations will become applicable on September 10, 2014, the effective date of the adopted amendment.

### **Affected Facilities**

The amendment revises the current BMPs for “Group 1” grain elevators and provides the option to include revised BMPs in the permits for new or modified “Group 2” grain elevators.

Group 1 grain elevators are specifically defined as facilities with PM<sub>10</sub> emissions less than 15 tons per year (567—22.10(455B)). Group 1 elevators are typically smaller grain elevators and are often “country grain elevators” that receive 50 percent or more of their grain from nearby farmers during harvest season. The owner or operator of a Group 1 elevator may use the BMP document and the streamlined registration process provided in rule 567—22.10(455B) rather than applying for an air construction permit.

Group 2 grain elevators have potential PM<sub>10</sub> emissions between 15 and 50 tons per year. In lieu of using the regular construction permit process, an owner or operator of a Group 2 elevator may complete a shorter application form specific to Group 2 elevators. The facility will receive a Group 2 permit that allows the facility to make certain changes without having to modify the permit. The BMPs included in the Group 2 permit are identical to the BMP document for Group 1 facilities. The amendment will affect only new or modified Group 2 facilities that apply for a new or revised Group 2 permit.

The amendment adds BMPs specific to grain vac operations to the current BMP document. Grain elevators that are not classified as Group 1 or Group 2 elevators are not covered by the proposed amendments. Grain elevators classified as Group 3 or Group 4 in rule 567—22.10(455B), as well as other grain elevators not covered by rule 567—22.10(455B), must obtain air construction permits. Construction permits include requirements specific to the facility and may require BMPs similar to those for Group 1 or Group 2 facilities.

**Item 2** amends the introductory paragraph of subrule 23.1(4) to reflect the most current amendment date to 40 Code of Federal Regulations (CFR) Part 63 adopted by reference in Chapter 23. The revised date reflects the amendments described below in Item 3 and Item 4.

**Item 3** amends paragraph 23.1(4)“ev” to adopt the federal NESHAP for Chemical Manufacturing at Area Sources (40 CFR Part 63, Subpart VVVVVV). The Commission originally adopted this NESHAP by reference in 2010. However, EO 72 rescinded the adoption of this standard concurrent with the rescission of the RICE NESHAP. Subsequent to EO 72, the EPA revised this NESHAP to provide clarity and regulatory relief to stakeholders. The Commission is now adopting this standard for chemical manufacturing facilities.

#### **Background**

In October 2009, EPA finalized the NESHAP for Chemical Manufacturing at Area Sources (Subpart VVVVVV, hereafter referred to as the “6V NESHAP”). The final 6V NESHAP appeared to include ethanol production facilities, but the standards were unclear on several points. In January 2012, EPA agreed to reconsider portions of the 6V NESHAP. On December 21, 2012, EPA issued final amendments to the 6V NESHAP and extended the compliance date until March 2013. With the assistance of the Iowa Renewable Fuels Association (IRFA), the Department determined that current dry-mill corn ethanol production facilities in Iowa are not subject to the 6V NESHAP. At this time, the Department has identified a small number of other chemical manufacturing facilities subject to the 6V NESHAP.

#### **Stakeholder Involvement**

Since EPA issued the original 6V NESHAP in October 2009, the Department has worked with IRFA to discuss outstanding applicability issues concerning the federal regulations. The Department met with IRFA to discuss EPA’s revised standards (issued on December 21, 2012) and the potential implications for ethanol production facilities in Iowa. IRFA agreed to work with its members and its national association to gather data on emissions from ethanol production that could potentially trigger 6V NESHAP applicability. Based on the data and analysis that IRFA provided to the Department in May and June 2013, the Department concurred with IRFA that current dry-mill corn ethanol production facilities in Iowa are not subject to the 6V NESHAP.

#### **Affected Facilities**

Based on information and analysis compiled by IRFA, the Department has determined that dry-mill corn ethanol production facilities in Iowa are not subject to the 6V NESHAP, and therefore will not have regulatory costs associated with the 6V NESHAP. Five other chemical manufacturing facilities have notified the Department and EPA that they are subject to the 6V NESHAP. Based on information available, it appears that two of these facilities are already complying with the 6V NESHAP. One of the facilities is currently under construction. The compliance status of the other two facilities is unknown.

Prior to publication of the Notice of Intended Action, EPA Region 7 provided informal recommendations that the Department note in the preamble for the adopted rules that EPA retains concurrent authority to enforce the 6V NESHAP once Iowa becomes the delegated authority. Upon adoption of the 6V NESHAP, the Department rather than EPA will be the primary authority to implement these regulations in Iowa, allowing the Department to provide compliance assistance and outreach to affected facilities as soon as possible. However, EPA retains concurrent authority to implement and enforce the 6V NESHAP in Iowa.

**Item 4** amends paragraph 23.1(4)“fd” to adopt the recently amended federal NESHAP for Area Source Standards for Prepared Feeds Manufacturing (40 CFR Part 63, Subpart DDDDDDD, hereafter referred to as the “7D NESHAP”). The Commission originally adopted this NESHAP by reference in 2010. However, EO 72 rescinded the adoption of this standard concurrent with the rescission of the RICE NESHAP. Subsequent to EO 72, the EPA revised this NESHAP standard to provide clarity and regulatory relief to stakeholders. The Commission is now adopting the 7D NESHAP.

#### **Background**

In January 2010, EPA published the 7D NESHAP. The 7D NESHAP appeared to cover all feed mills that used chromium and manganese in production, but several provisions of the final standards were unclear. In 2011, EPA agreed to reconsider some provisions of the 7D NESHAP. EPA finalized its reconsideration on December 23, 2011, revising the 7D NESHAP so that feed mills with pellet

cooler operations were not required to install new emissions controls if the facility had existing control equipment. The 7D NESHAP compliance date for existing feed mills was January 5, 2012.

#### **Stakeholder Involvement**

The Department has worked with AAI since EPA issued the original 7D NESHAP in January 2010. EPA issued final amendments on December 23, 2011, that generally allowed affected feed mills to comply with the 7D NESHAP by following basic housekeeping requirements and using existing emissions control equipment.

#### **Affected Facilities**

Based on notifications submitted to EPA and the survey that the University of Northern Iowa (UNI) air emissions assistance program conducted, the Department estimates that approximately 90 facilities in Iowa are subject to the 7D NESHAP. The majority of these facilities are subject only to basic housekeeping requirements. The Department estimates that 20 of these facilities are required to control particulate emissions (a surrogate for manganese and chromium emissions) from pellet cooling operations. Most of these facilities have submitted the required notifications to EPA and the Department indicating the facilities are in compliance with the 7D NESHAP. The 7D NESHAP requires all subject facilities to undertake additional monitoring, record keeping, and reporting.

Prior to publication of the Notice of Intended Action, EPA Region 7 provided informal recommendations that the Department note in the preamble for the adopted rules that EPA retains concurrent authority to enforce the 7D NESHAP once Iowa becomes the delegated authority. Upon adoption of the 7D NESHAP, the Department rather than EPA will be the primary authority to implement these regulations in Iowa, allowing the Department to provide compliance assistance and outreach to affected facilities as soon as possible. However, EPA retains concurrent authority to implement and enforce the 7D NESHAP in Iowa.

#### **Jobs Impact Statement**

The following is a summary of the jobs impact statement. The complete jobs impact statement is available from the Department upon request.

After analysis and review, the Department has determined that the amendments will have no impact on private sector jobs and employment opportunities in the state.

#### **Grain Vac BMPs**

Grain elevator owners and operators will likely entail costs to control particulate emissions during grain vac operations. However, these costs should be minimal and should not negatively impact jobs at grain elevators. First, the activities listed in the BMP document are simply examples. The grain elevator owner or operator may determine if management activities are necessary to reasonably prevent dust from grain vac operations from crossing the property line and whether any of the examples included in the BMP document are appropriate for the facility. The owner or operator may choose to employ different management practices. Second, the BMPs were developed by a stakeholder group consisting of representatives from both grain elevator and grain vac vendors. The workgroup developed practical, cost-effective practices that are already being successfully implemented at some grain elevators. Third, the Department expects that grain elevator owners and operators will choose to implement BMPs only as necessary and will not implement practices at such a frequency or cost to adversely impact jobs at their facilities.

#### **6V NESHAP**

Based on information and analysis compiled by IRFA, the Department has determined that dry-mill corn ethanol production facilities in Iowa are not subject to the 6V NESHAP and therefore would not have regulatory costs associated with the 6V NESHAP. The five other facilities potentially affected by the 6V NESHAP may have additional regulatory requirements, but these are not expected to be significant enough to impact jobs.

#### **7D NESHAP**

The 7D NESHAP requires all subject facilities to undertake additional monitoring, record keeping, and reporting. However, these requirements are not expected to be sufficient to negatively impact jobs at these facilities.

These amendments are intended to implement Iowa Code section 455B.133.

These amendments will become effective on September 10, 2014.

The following amendments are adopted.

ITEM 1. Amend subparagraph **22.10(3)“a”(2)** as follows:

(2) Best management practices (BMP). The owner or operator of a Group 1 facility shall implement best management practices (BMP) for controlling air pollution at the facility and for limiting fugitive dust at the facility from crossing the property line. The owner or operator shall implement BMP according to the department manual, Best Management Practices (BMP) for Grain Elevators (December 2007; revised July 15, 2014), as adopted by the commission on January 15, 2008, and July 15, 2014, and adopted by reference herein (available from the department, upon request, and on the department's Internet Web site). No later than March 31, 2009, the owner or operator of an existing Group 1 facility shall fully implement applicable BMP, except that BMPs for grain vacuuming operations shall be fully implemented no later than September 10, 2014. Upon startup of equipment at the facility, the owner or operator of a new Group 1 facility shall fully implement applicable BMP.

ITEM 2. Amend subrule 23.1(4), introductory paragraph, as follows:

**23.1(4)** *Emission standards for hazardous air pollutants for source categories.* The federal standards for emissions of hazardous air pollutants for source categories, 40 Code of Federal Regulations Part 63 as amended or corrected through ~~September 19, 2011,~~ December 21, 2012, are adopted by reference, except those provisions which cannot be delegated to the states. The corresponding 40 CFR Part 63 subpart designation is in parentheses. An earlier date for adoption by reference may be included with the subpart designation in parentheses (except for paragraph 23.1(4)“cz,” which specifies a later date for adoption by reference). 40 CFR Part 63, Subpart B, incorporates the requirements of Clean Air Act Sections 112(g) and 112(j) and does not adopt standards for a specific affected facility. Test methods (Appendix A), sources defined for early reduction provisions (Appendix B), and determination of the fraction biodegraded ( $F_{bio}$ ) in the biological treatment unit (Appendix C) of Part 63 also apply to the affected activities or facilities. For the purposes of this subrule, “hazardous air pollutant” has the same meaning found in 567—22.100(455B). For the purposes of this subrule, a “major source” means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless a lesser quantity is established, or in the case of radionuclides, where different criteria are employed. For the purposes of this subrule, an “area source” means any stationary source of hazardous air pollutants that is not a “major source” as defined in this subrule. Paragraph 23.1(4)“a,” general provisions (Subpart A) of Part 63, shall apply to owners or operators who are subject to subsequent subparts of 40 CFR Part 63 (except when otherwise specified in a particular subpart or in a relevant standard) as adopted by reference below.

ITEM 3. Amend paragraph **23.1(4)“ev”** as follows:

*ev. Emission standards for hazardous air pollutants for area sources: chemical manufacturing.* ~~Rescinded IAB 9/19/12, effective 10/24/12.~~ This standard applies to chemical manufacturing at new and existing facilities that are area sources for hazardous air pollutant emissions. (Part 63, Subpart VVVVVV)

ITEM 4. Amend paragraph **23.1(4)“fd”** as follows:

*fd. Emission standards for hazardous air pollutants for area sources: prepared feeds manufacturing.* ~~Rescinded IAB 9/19/12, effective 10/24/12.~~ This standard applies to prepared feeds manufacturing that produces animal feed products (not including feed for cats or dogs) and uses chromium or manganese compounds at new and existing facilities that are area sources for hazardous air pollutant emissions. (Part 63, Subpart DDDDDDD)

[Filed 7/16/14, effective 9/10/14]

[Published 8/6/14]

EDITOR'S NOTE: For replacement pages for IAC, see IAC Supplement 8/6/14.